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10/069,463	02/26/2002	Wilma M Dausch	50683	3250

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EXAMINER

PENG, KUO LIANG

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/069,463

Applicant(s)

DAUSCH ET AL.

Examiner

Kuo-Liang Peng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 2/26/02 Preliminary amendment.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-23 is/are rejected.
- 7) ☒ Claim(s) 9-23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *See Continuation Sheet*.

Continuation of Attachment(s) 6). Other: English translation of WO 99/04750.

### DETAILED ACTION

1. The Applicants' preliminary amendment filed on February 26, 2002 was received.  
Claims 1-8 are deleted. Claims 9-10, 13-18 and 22-23 are amended.

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

### *Claim Objections*

3. Claims 9-23 are objected to because of the following informalities:

Applicants are advised to remove the unnecessary symbols "--" in the claims.

Applicants are advised to redraw those chemical structures in the claims, where the fonts are not consistent.

In formula (I) of Claims 9-10, should one of the  $R^1$  substituents in the "y" repeating units be  $R^5$ , as indicated in the specification (page 26, lines 20-25)?

In Claims 9-10, after the siloxane group designated for  $R^4$ , should be a word "or"?

In Claim 9, should the structure  $(-(CO)_c-R^6)$  be placed before where the definition of  $R^6$  starts?

In Claim 9 (page 6, line 1) and Claim 10 (page 8, line 9 from bottom), should "can" in the definition of  $R^6$  be -- optionally --?

In Claim 9 (page 6, line 4) and Claim 10 (page 8, line 8 from bottom), should "c=O" be -- c = 0 --?

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In Claim 9 (page 6, lines 6-7) and Claim 10 (page 8, line 5-4 from bottom), should “are cyclic” and “are of an” be -- cyclic -- and -- an --, respectively?

In Claim 9 (page 6, line 2 from bottom), should “further polymer chosen from the group formed from” be -- further containing polymer selected from the group consisting of --?

In Claim 11, should the last line be deleted?

Claims 12 and 16 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. R<sup>4</sup> being C<sub>2</sub>-C<sub>4</sub> is not supported by the parent claim(s).

In Claims 15 and 16, should “addition polymer” be -- polymer --?

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 9-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claims 9, 10 and 15-16 (line 2) and 23 (line 1), the word “obtainable” is not a positive limitation, and does not constitute a limitation in any patentable sense. See *In re Hutchinson*, 33 CCPA 879, 154 F. 2d 135, 69 USPQ 138 (CCPA 1946). Applicants are advised to replace “obtainable by” by -- obtained by --.

In Claim 9 (page 6, line 4 from bottom), Claim 10 (page 9, line 6), Claim 12 (page 65, line 45), Claim 16 (line 3 from bottom) and Claim 23 (page 12, line 1), “may be” causes confusion because it is not clear as to what a and b are when they are not integers between 0 and 50.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by “such as” and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, Claims 12, 16 and 23 recite the broad recitation “n = 1 to 6”, and the claim also recites “in particular 2 to 4” which is the narrower statement of the range/limitation.

Claim 14 recites the use of a monomer (a) which is either (a1) or (a2), which is not supported by the specification wherein (a) is a mixture of (a1) and (a2) (page 22, lines 10-11).

Claims 17-22 provide for the use of “the preparations”, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is

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intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 17-22 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 9 and 13-16, 18, 20 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Blakenburg (WO 99/04750).

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With respect to Claims 9 and 13-16, 18, 20 and 23, Blakenburg discloses a preparation obtained by free-radical polymerization of a monomer mixture of a) ethylenically unsaturated monomers and b) polyalkylene oxide-containing silicone derivatives of formula (I) (page 2, lines 16-25, page 10, line 24 to page 11, line 46 and Examples). Note that the preparation can contain colorants (page 12, lines 36-42) so that it can be a decorative cosmetics. In addition, polyurethanes can be incorporated (page 9, lines 19-26).

With respect to Claim 22, the aforementioned preparation can be used for hairsetting, hairsprays, etc. (page 10, lines 9-13 and page 12, lines 26-42). Therefore, the preparation is used as a film former, especially when it is used in combination of a film-forming auxiliaries (page 10, lines 4-7).

9. Claims 9, 13-16, 18, 20 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Blakenburg (WO 99/04750) as evidenced by Tropsch (US 5,869,032) and Sramek (US 4,871,529).

With respect to Claims 9, 13-16, 18, 20 and 23, Blakenburg discloses a preparation obtained by free-radical polymerization of a monomer mixture of a) ethylenically unsaturated monomers and b) polyalkylene oxide-containing silicone derivatives of formula (I) (page 2, lines 16-25, page 10, line 24 to page 11, line 46 and Examples). Note that the preparation can contain colorants (page 12, lines 36-42) so that it can be a decorative cosmetics. In addition, Luvimer, Ultrahold and Ultrahold Strong can be incorporated (page 9, lines 19-26). Furthermore, Tropsch teaches that Luvimer and Ultrahold Strong is a copolymer of t-butyl acrylate, ethyl acrylate and methacrylic acid and a copolymer of N-tert-butylacrylamide, ethyl acrylate and acrylic acid,



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respectively (col. 4, lines 10-29). Sramek teaches that Ultrahold is a copolymer of t-butyl acrylamide, acrylic acid and ethyl acrylate (col. 5, line 65 to col. 6, line 11). Normally, only one reference should be used in making a rejection under 35 U.S.C. 102. However, a 35 U.S.C. 102 rejection over multiple references has been held to be proper when extra references are cited to A) Prove the primary reference contains an "enabled disclosure"; B) Explain the meaning of a term used in the primary reference; or C) Show that a characteristic not disclosed in the reference is inherent. See MPEP 2131.01. In this instance, Tropsch and Sramek are cited here only for the purpose of showing what Luvimer, Ultrahold and Ultrahold Strong refer to.

With respect to Claim 22, the aforementioned preparation can be used for hairsetting, hairsprays, etc. (page 10, lines 9-13 and page 12, lines 26-42). Therefore, the preparation is used as a film former, especially when it is used in combination of a film-forming auxiliaries (page 10, lines 4-7).

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 9, 13-16, 18, 20 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blakenburg (WO 99/04750) in view of Sramek (US 4,871,529) or Kim (US 6,277,386).

With respect to Claims 9, 13-16, 18, 20 and 23, Blakenburg discloses a preparation obtained by free-radical polymerization of a monomer mixture of a) ethylenically unsaturated monomers and b) polyalkylene oxide-containing silicone derivatives of formula (I) (page 2, lines 16-25, page 10, line 24 to page 11, line 46 and Examples). The polymerization can be carried out in the presence of other polymers (page 9, lines 19-26). The preparation can be used for cosmetic hair formulation (page 12, lines 26-35). Note that the preparation can contain colorants (page 12, lines 36-42) so that it can be a decorative cosmetics.

The difference between Blakenburg and the present invention is the requirement of a) polypyrrolidones; copolymers of acrylic acid, methyl methacrylate, octylacrylamide, butylaminoethyl methacrylate and hydroxypropyl methacrylate; copolymers of vinyl acetate and crotonic acid and/or vinyl neodecanoate or copolymers of vinyl acetate and/or vinyl propionate and N-vinylpyrrolidone; and b) polyvinylcaprolactams.

With respect to a), Sramek discloses a cosmetic hair formulation comprising polysiloxane-polyoxyalkylene and polypyrrolidones; copolymers of acrylic acid, methyl methacrylate, octylacrylamide, butylaminoethyl methacrylate and hydroxypropyl methacrylate; copolymers of vinyl acetate and crotonic acid and/or vinyl neodecanoate or copolymers of vinyl acetate and/or vinyl propionate and N-vinylpyrrolidone (Abstract and col. 5, line 52 to col. 6, line 50). Note that Sramek and Blakenburg are in the same field of endeavor. In light of which, it would have been obvious to one of ordinary skill in the art at the time of invention to find these copolymers and incorporate the them into Blakenburg's formulation, and thereby obtain the present invention.

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With respect to b) Kim discloses a hair care composition comprising a polysiloxane and a polyvinylcaprolactam (col. 5, lines 10-33 and col. 9, lines 24-42). Note that Kim and Blakenburg are in the same field of endeavor. In light of which, it would have been obvious to one of ordinary skill in the art at the time of invention to find the polyvinylcaprolactam and incorporate the them into Blakenburg's formulation, and thereby obtain the present invention.

With respect to Claim 22, the aforementioned preparation can be used as a hairsetting agent, hairsprays, etc. (page 10, lines 9-13 and page 12, lines 26-42). Therefore, the preparation is used as a film former, especially when it is used in combination of a film-forming auxiliaries (page 10, lines 4-7).

12. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blakenburg (WO 99/04750) in view of Habeck (US 6 037 487).

Blakenburg discloses a preparation obtained by free-radical polymerization of a monomer mixture of a) ethylenically unsaturated monomers and b) polyalkylene oxide-containing silicone derivatives of formula (I). The preparation can be used for cosmetic formulations such as skin formulations, cosmetic hair formulations, etc. (page 2, lines 16-25, page 10, line 24 to page 11, line 46 and page 12, lines 26-42 and Examples).

The difference between Blakenburg and the present invention is the requirement of a UV light protection filters.

Habeck teaches it is well known in the art to use a screening agent in cosmetic formulations such as hair-care formulations, skin-care formulations, etc. (col. 1, lines 7-18). Habeck further teaches the use of a UV light protection filter of formula I as a UV filter in

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cosmetic formulations. The motivation of using Habeck's UV light protection filter is to provide UV protection (Abstract, col. 2, lines 13-53). In light of the benefit mentioned, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate Habeck's UV light protection filter into Blakenburg's cosmetic formulation, and thereby obtain the present invention.

13. The "X" references cited in the international search report are not relied upon because none of them teaches or fairly suggests the specific polyalkylene oxide-containing silicone derivatives set forth in the present invention.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (703) 306-5550. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson, can be reached on (703) 308-2340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Kuo-Liang Peng

May 2, 2003

A handwritten signature in black ink, appearing to read 'Kuo-Liang Peng', is written over the typed name and date.